

Systematic Embryology of the Angiosperms. By GWENDA L. DAVIS. 528 pp. John Wiley and Sons, N.Y., London, Sydney, 1966. \$19.75.

Professor Davis uses embryology in the broad sense of including structures involved in reproduction by seed, such as the entire ovule and anther, the male and female gametophytes, and the embryo and endosperm.

It is pointed out that "far from the descriptive phase of angiosperm embryology being over, it is hardly begun. . . . In the Compositae, for example, although there are over 300 publications, these concern species in only 15% of the genera. . . ." In nearly 20% of the families recognized by Hutchinson there could be traced no information on any embryological structure or process.

Embryological characters useful in systematics and taxonomy are described in the introduction. Considerably more attention is paid to the development of the anther than is usually found in embryological discussions. In the treatment of the ovule, apomixis, adventive embryony, and polyembryony are included.

The second part of the book lists alphabetically the angiosperm families as classified by Hutchinson (1959). Brief references to important embryological works are given for each family, together with a list of the authors. It is unfortunate that, for the larger families at least, the genera on which these authors worked are not mentioned, so that a long search in the bibliography is required.

By far the greatest part of the book consists of a bibliography of some 5000 items dealing with embryological literature.

It is this last feature that makes the book so valuable, not only to plant embryologists and plant breeders, but also to all botanists who have occasion to know what information is available on the embryological aspects of a particular species.

The last comprehensive similar treatment of plant embryology was Schnarf's "Vergleichende Embryologie der Angiospermen" published in 1931. The "Systematic Embryology of the Angiosperms" can now supplant this valuable reference work. Professor Davis is to be heartily congratulated by embryologists for stating the case for the use of embryology in taxonomy, and by all botanists in making available to them such a comprehensive embryological bibliography.—MARION S. CAVE, Department of Botany, University of California, Berkeley.

NOTES AND NEWS

TERRESTRIAL VASCULAR PLANTS OF AÑO NUEVO I., SAN MATEO CO., CALIFORNIA.—This small, 12 acre island (Orr, R. T., and T. C. Poulter, *Pacific Discovery* 15(1): 13–19, 1962) lies about one-fourth mile off the coast at Año Nuevo Pt. about Lat N 37° 06.5', Long 122° 20' W. It is of interest for several reasons. An historic lighthouse was maintained on the island from 1873 to 1948. Año Nuevo I. serves as a rookery for California sea lions, Steller sea lions, elephant seals, and harbor seals (Orr, R. T., and T. C. Poulter, *Proc. Calif. Acad.*: 32:377–404, 1965) and studies in the population dynamics of a rabbit population introduced between 1948 and 1953 are being carried out by David C. Regnery of Stanford University. The island is now administered through the California Division of Beaches and Parks.

Because of the effect that the animal populations will have, and indeed have had, upon the vegetation, I think it worth while to publish a list of the plants I collected during three visits (May 20, 1963, July 19, 1963, and June 19, 1964) which were made possible through the courtesy of Thomas C. Poulter. With the exception of *Rhus diversiloba* and *Meembryanthemum chilense*, which I did not collect, my specimens are in the Dudley Herbarium. Nomenclature follows that in my *Flora of the Santa Cruz Mountains of California* (Stanford Univ. Press, 1961) except for Onagraceae.